

CLAIMS

1. (Currently amended) A method for the preparation of a suspension of carbon nanotubes at a concentration of from at least 0.5 wt% to 10 wt%, comprising
 - a. adding to a fluid medium a material comprising carbon nanotubes;
 - b. dissolving a block copolymer in the desired concentration ranging from 0.3 wt% to 10 wt% in said fluid medium, prior to the addition of carbon nanotubes or thereafter, wherein the mass ratio of said copolymer to carbon nanotubes ranges from 0.1 to 10; and
 - c. stirring said fluid medium comprising sonication;
thereby to bring about de-agglomeration of the nanotubes into dispersed small bundles of nanotubes or essentially single tubes, said fluid medium being a solvent selective toward at least two blocks of said block copolymer.
2. (Canceled)
3. (Previously presented) A method according to claim 1, wherein said small bundles comprise two and three carbon nanotubes.
4. (Original) A method according to claim 1, wherein said fluid medium is selected from the group consisting of water or aqueous solution, organic solvent, supercritical fluid, and their mixture.
5. (Original) A method according to claim 1, wherein said block copolymer comprises in its sequence at least two blocks that differ either in the chemical structure of their monomer units or in the sequence of said units within the block.
6. (Original) A method according to claim 1, wherein said block copolymer comprises two or three blocks that differ in the chemical structure of their monomer units.
7. (Previously presented) A method according to claim 1, wherein said block copolymer has structure A-B or A-B-A or A-B-C.

8. (Previously presented) A method according to claim 1, wherein said block copolymer comprises two or three blocks which have more than ten monomer units each.
9. (Canceled)
10. (Previously presented) A method according to claim 1, wherein said block copolymer is soluble in said fluid medium.
11. (Previously presented) A method according to claim 5, wherein said fluid medium dissolves selectively at least two different homopolymers, each having the same chemical composition as one of said different blocks forming said block copolymer.
12. (Currently amended) A method for the preparation of a powder of de-agglomerated carbon nanotubes comprising
 - a. preparing a suspension of carbon nanotubes in a fluid medium, comprising adding to said medium carbon nanotubes at a concentration of from 0.5 wt% to 10 wt%, and a block copolymer at the mass ratio of said copolymer to carbon nanotubes ranging from 0.1 to 10, sonicating, and
 - b. removing said fluid medium from said suspension.
13. (Original) A method according to claim 12, wherein said removing comprises filtration, centrifugation, evaporation, or lyophilization.
14. (Original) A method according to claim 1, wherein the sum of concentrations of said carbon nanotubes and said copolymer in the suspension is up to 60 wt%.
15. (Canceled)
16. (Previously presented) A method according to claim 1, wherein said block copolymer comprises a polymer selected from the group consisting of polyoxyalkylenes, polystyrene, polyacrylate, polysiloxane, and their derivatives.

17. (Original) A method according to claim 1, wherein said fluid medium comprises water, alcohol, or alkane.
18. (Withdrawn) A suspension of carbon nanotubes, prepared according to claim 1.
19. (Withdrawn) A powder of carbon nanotubes, comprising a block copolymer in admixture with said nanotubes.
20. (Withdrawn) The powder of claim 19, wherein said carbon nanotubes are substantially de-agglomerated.
21. (Withdrawn) Use of the carbon nanotubes of claim 18 for depositing carbon nanotubes onto a solid support in a required pattern.
22. (Withdrawn) Use of the carbon nanotubes of claim 18 for preparing a conductive plastic material.
23. (Withdrawn) Use of the carbon nanotubes of claim 18 as a reinforcing agent for polymeric matrices.
24. (Withdrawn) Use of the carbon nanotubes of claim 18 as an electric conductive connector between two electronic devices.
25. (Withdrawn) Use according to claim 24, wherein one of the devices, or both of them, are nanoelectronic devices.
26. (Withdrawn) Use of the carbon nanotubes of claim 18 in a technique that comprises the formation of a thin layer.
27. (Withdrawn) Use of the carbon nanotubes of claim 18 in a technique that comprises the formation of a thin wire.

- 28. (Withdrawn) Use of the carbon nanotubes of claim 18 in a printing technique.
- 29. (Withdrawn) Use of the carbon nanotubes of claim 18 in a coating technique.
- 30. (Withdrawn) An article comprising a polymeric material which comprises carbon nanotubes and a block copolymer.
- 31. (Withdrawn) Use of the carbon nanotubes of claim 19 for depositing carbon nanotubes onto a solid support in a required pattern.
- 32. (Withdrawn) Use of the carbon nanotubes of claim 19 for preparing a conductive plastic material.
- 33. (Withdrawn) Use of the carbon nanotubes of claim 19 as a reinforcing agent for polymeric matrices.
- 34. (Withdrawn) Use of the carbon nanotubes of claim 19 as an electric conductive connector between two electronic devices.
- 35. (Withdrawn) Use according to claim 34, wherein one of the devices, or both of them, are nanoelectronic devices.
- 36. (Withdrawn) Use of the carbon nanotubes of claim 19 in a technique that comprises the formation of a thin layer.
- 37. (Withdrawn) Use of the carbon nanotubes of claim 19 in a technique that comprises the formation of a thin wire.
- 38. (Withdrawn) Use of the carbon nanotubes of claim 19 in a printing technique.
- 39. (Withdrawn) Use of the carbon nanotubes of claim 19 in a coating technique.